

Appl. No. : 09/910,430  
Filed : July 19, 2001

### AMENDMENTS TO THE CLAIMS

1. **(Withdrawn)** A polynucleotide obtained from tick salivary gland and presenting more than 75% identity with the nucleotide sequence SEQ.ID.NO.26 or a sequence complementary thereto, or an active fragment thereof.

2. **(Withdrawn)** The polynucleotide of claim 1, which presents at least 80% identity with SEQ.ID.NO.26 nucleotide sequence.

3. **(Withdrawn)** The polynucleotide of claim 1, which is at least 90% identical with SEQ.ID.NO.26 nucleotide sequence.

4. **(Withdrawn)** The polynucleotide of claim 1, which is at least 95% identical with SEQ.ID.NO.26 nucleotide sequence.

5. **(Withdrawn)** The polynucleotide of claim 1, which is at least 98-99% identical with SEQ.ID.NO.26 nucleotide sequence.

6. **(Withdrawn)** The polynucleotide of claim 1, which is at least 99% identical with SEQ.ID.NO.26 nucleotide sequence.

7. **(Currently amended)** A isolated polypeptide encoded by ~~the polynucleotide of claim 1, or a biologically active fragment or portion thereof~~ a polynucleotide obtained from tick salivary gland said polynucleotide comprising a nucleotide sequence of SEQ ID NO: 26.

8. **(Currently amended)** ~~A~~ The isolated polypeptide according to claim 7, modified by or linked to at least one substitution group, preferably selected from the group consisting of amide, acetyl, phosphoryl, and/or glycosyl groups.

9. **(Currently amended)** The isolated polypeptide of claim 7 in the form of a "mature" protein.

10. **(Currently amended)** The isolated polypeptide of claim 7 as part of a larger protein.

11. **(Currently amended)** The isolated polypeptide of claim 7 as part of a fusion protein.

12. **(Currently amended)** The isolated polypeptide of claim 7 further including at least one additional amino acid sequence which contains secretory or leader sequences, pro-sequences, sequences which help in purification ~~such as multiple histidine residues~~, or additional sequences for stability during recombination protection.

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13-21. Canceled

22. **(Withdrawn)** A vector comprising at least one element selected from the group consisting of the polynucleotide according to claim 1, the polypeptide according to claim 7, the variant according to claim 13 and active fragments thereof.

23. **(Withdrawn)** A cell transfected or comprising the vector according to claim 22.

24. **(Withdrawn)** An inhibitor directed against the polynucleotide according to claim 1 or the polypeptide according to claim 7, or the variant according to claim 13.

25. **(Withdrawn)** The inhibitor according to claim 24, which is an antibody or an hypervariable portion thereof.

26. **(Withdrawn)** A hybridoma cell line expressing the inhibitor according to claim 25.

27. **(Currently amended)** A pharmaceutical composition comprising an adequate pharmaceutical carrier and ~~an element selected from the group consisting of the polynucleotide according to claim 1, the polypeptide according to claim 7, the variant according to claim 13, the vector according to claim 22, the cell according to claim 23, the inhibitor according to claim 24, or a mixture thereof.~~

28. **(Original)** The pharmaceutical composition according to claim 27 which presents immunomodulatory properties.

29. **(Currently amended)** An immunological composition or vaccine for inducing an immunological response in a mammalian host to a tick salivary gland polypeptide which comprises ~~at least one element of the group consisting of~~

~~f) tick salivary gland polynucleotide the nucleotide sequence SEQ. ID. NO.26;~~

~~g) a- an isolated tick salivary gland polypeptide encoded by a polynucleotide presenting more than 75% identity with comprising the nucleotide sequence SEQ. ID. NO.26, or a biologically active fragment or a portion thereof;~~

~~h) — a variant of the polynucleotide presenting more than 75% identity with the nucleotide sequence SEQ.ID.NO.26 or a sequence complementary thereto, or an active fragment thereof;~~

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~~i) — a variant of the polypeptide encoded by a polynucleotide presenting more than 75% identity with the nucleotide sequence SEQ.ID.NO.26 or a biologically active fragment of said polypeptide; and~~

~~j) — epitope bearing fragments, analogs, outer membrane vesicles or cells (attenuated or otherwise) of components a) or b) or c);~~

30. **(Original)** The composition of Claim 29, further comprising a carrier.

31. **(Withdrawn)** A method for treating or preventing a disease affecting a mammal, said method comprising the step of administrating to said mammal a sufficient amount of the pharmaceutical composition according claim 27 or the immunological composition or vaccine according to claim 29, in order to prevent or cure either the transmission of pathogenous agents by tick, especially by *Ixodes ricinus*, or the symptoms of diseases induced by tick or pathogenous agents transmitted by tick.

32. **(Currently amended)** A diagnostic kit for detecting a disease or susceptibility to a disease induced or transmitted by tick, especially *Ixodes ricinus*, which comprises:

~~g) a tick salivary gland polynucleotide presenting more than 75% identity with the nucleotide sequence SEQ. ID. NO.26 or a sequence complementary thereto, or an active fragment thereof;~~

~~h) — a nucleotide sequence complementary to that of a);~~

~~i) an isolated tick salivary gland polypeptide encoded by a polynucleotide presenting more than 75% identity with comprising the nucleotide sequence SEQ.ID.NO.26\_ or a biologically active fragment or a portion thereof;~~

~~j) — a variant of the polynucleotide presenting more than 75% identity with the nucleotide sequence SEQ.ID.NO.26 or a sequence complementary thereto, or an active fragment thereof;~~

~~e) — a variant of the polypeptide encoded by a polynucleotide presenting more than 75% identity with the nucleotide sequence SEQ.ID.NO.26 or a biologically active fragment of said polypeptide;~~

~~f) — an inhibitor directed against a);~~

~~g) — an inhibitor directed against e);~~

~~h) — an inhibitor directed against the variant of d) and/or e);~~

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- ~~i) an antibody or hypervariable portion thereof comprised of the inhibitor of f);~~  
~~j) an antibody or hypervariable portion thereof comprised of the inhibitor of g);~~  
~~k) an antibody or hypervariable portion thereof comprised of the inhibitor of h); or~~  
~~l) a phage displaying the antibody of i), j) or k), whereby a), b), c), d), e), f), g), h), i), j) or k) may comprise a substantial component.~~

33. (New) The isolated polypeptide of Claim 12, wherein said sequences which help in purification comprise multiple histidine residues.